

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :  
HISASHI SHODA ET AL : ATTN: APPLICATION DIVISION  
SERIAL NO: NEW U.S. PCT APPLN :  
(Based on PCT/JP01/03267)  
FILED: HEREWITH :  
FOR: OPTICAL RECORDING :  
MEDIUM :

PRELIMINARY AMENDMENT

ASSISTANT COMMISSIONER FOR PATENTS  
WASHINGTON, D.C. 20231

SIR:

Prior to examination on the merits, please amend the above-identified application as follows.

IN THE SPECIFICATION

Please insert the following text as a separate paragraph on page 1, line 5.

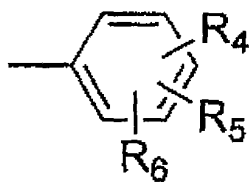
International application PCT/JP01/0326 has not been published in English under PCT Article 21(2).

Please replace the paragraph beginning on page 5, line 8, through page 9, line 13 as follows:

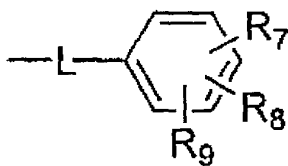
All of R<sub>1</sub> in the same ring structure may be the same or different, and each R<sub>1</sub> represents a hydrogen atom, a straight chain or branched alkyl group having from 1 to 6 carbon atoms (e.g., methyl, ethyl, n-propyl, isopropyl, n-butyl, sec-butyl, tert-butyl, n-pentyl,

n-hexyl), a cyclic alkyl group having from 3 to 6 carbon atoms (e.g., cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl), an alkoxyl group having from 1 to 6 carbon atoms (e.g., methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy, sec-butoxy, tert-butoxy, n-pentyloxy, n-hexyloxy), an alkylcarbonyl group having from 1 to 7 carbon atoms (e.g., acetyl, propionyl, butyryl, isobutyryl, valeryl, isovaleryl, pivaloyl, hexanoyl, heptanoyl), a straight chain or branched alkenyl group having from 2 to 6 carbon atoms (e.g., vinyl, 1-propenyl, allyl, isopropenyl, 2-butenyl, 1,3-butadienyl, 1-pentenyl, 1-hexenyl), a cyclic alkenyl group having from 3 to 6 carbon atoms (e.g., cyclopentenyl, cyclohexenyl), a halogen atom (e.g., fluorine, chlorine, bromine, iodine), a formyl group, a hydroxyl group, a carboxyl group, a hydroxyalkyl group having from 1 to 6 carbon atoms (e.g., hydroxymethyl, hydroxyethyl), an alkoxycarbonyl group having from 2 to 7 carbon atoms (e.g., methoxycarbonyl, ethoxycarbonyl, n-propoxycarbonyl, isopropoxycarbonyl, n-butoxycarbonyl, sec-butoxycarbonyl, tert-butoxycarbonyl, n-pentyloxycarbonyl, n-hexyloxycarbonyl), a nitro group, a cyano group, an amino group, an alkylamino group having from 1 to 6 carbon atoms (e.g., methylamino, ethylamino, n-propylamino, n-butylamino), a dialkylamino group having from 2 to 12 carbon atoms (e.g., dimethylamino, diethylamino, di-n-propylamino, di-n-butylamino), an alkoxycarbonylalkyl group having from 3 to 7 carbon atoms (e.g., methoxycarbonylmethyl, ethoxycarbonylmethyl, n-propoxycarbonylmethyl, isopropoxycarbonylethyl), an alkylthio group having from 1 to 6 carbon atoms (e.g., methylthio, ethylthio, n-propylthio, sec-butylthio, tert-butylthio, n-pentylthio, n-hexylthio), an alkylsulfonyl group having from 1 to 6 carbon atoms (methylsulfonyl, ethylsulfonyl, n-propylsulfonyl, isopropylsulfonyl, n-butylsulfonyl, sec-butylsulfonyl, tert-butylsulfonyl, n-pentylsulfonyl, n-hexylsulfonyl), an aryl group having from 6 to 16 carbon atoms which may have substituent(s), an arylcarbonyl group having from 7 to 17 carbon atoms which may have substituent(s),  $-\text{CR}_2=\text{C}(\text{CN})\text{R}_3$  [wherein  $\text{R}_2$  represents a hydrogen atom or an alkyl group having from 1 to 6 carbon atoms

(e.g., methyl, ethyl, n-propyl, isopropyl, n-butyl, sec-butyl, tert-butyl, n-pentyl, n-hexyl); and  $R_3$  represents a cyano group or an alkoxycarbonyl group having from 2 to 7 carbon atoms (e.g., methoxycarbonyl, ethoxycarbonyl, n-propoxycarbonyl, isopropoxycarbonyl, n-butoxycarbonyl, sec-butoxycarbonyl, tert-butoxycarbonyl, n-pentyloxycarbonyl, n-hexyloxycarbonyl)],



[wherein  $R_4$  to  $R_6$  each represents a hydrogen atom, a nitro group, a halogen atom (e.g., fluorine, chlorine, bromine, iodine), a straight chain or branched alkyl group having from 1 to 6 carbon atoms (e.g., methyl, ethyl, n-propyl, isopropyl, n-butyl, sec-butyl, tert-butyl, n-pentyl, n-hexyl), a cyclic alkyl group having from 3 to 6 carbon atoms (e.g., cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl), an alkoxyl group having from 1 to 6 carbon atoms (e.g., methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy, sec-butoxy, tert-butoxy, n-pentyloxy, n-hexyloxy)],



[wherein  $R_7$  to  $R_9$  each represents a hydrogen atom, a nitro group, a halogen atom (e.g., fluorine, chlorine, bromine, iodine), a straight chain or branched alkyl group having from 1 to 6 carbon atoms (e.g., methyl, ethyl, n-propyl, isopropyl, n-butyl, sec-butyl, tert-butyl, n-pentyl, n-hexyl), a cyclic alkyl group having from 3 to 6 carbon atoms (e.g., cyclopropyl,

cyclobutyl, cyclopentyl, cyclohexyl), an alkoxyl group having from 1 to 6 carbon atoms (e.g., methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy, sec-butoxy, tert-butoxy, n-pentyloxy, n-hexyloxy); and L represents -SCH<sub>2</sub>- or -SO<sub>3</sub>-, a halogenated alkyl group having from 1 to 6 carbon atoms (e.g., trifluoromethyl, pentafluoroethyl, heptafluoro-n-propyl, heptafluoroisopropyl, perfluoro-n-butyl, perfluoro-sec-butyl, perfluoro-tert-butyl, perfluoro-n-pentyl, perfluoro-n-hexyl), a halogenated alkoxyl group having from 1 to 6 carbon atoms (e.g., trifluoromethoxy, pentafluoroethoxy, 2,2,2-trifluoroethoxy, pentafluoroethoxy, perfluoro-n-butoxy, perfluoro-sec-butoxy, perfluoro-tert-butoxy, perfluoro-n-pentyloxy, perfluoro-n-hexyloxy), or a halogenated alkylthio group having from 1 to 6 carbon atoms (e.g., trifluoromethylthio, pentafluoroethylthio, heptafluoro-n-propylthio, heptafluoroisopropylthio, perfluoro-n-butylthio, perfluoro-sec-butylthio, perfluoro-n-pentylthio, perfluoro-n-hexylthio).

Please replace the text beginning on page 12, line 17, through page 14, line 4 as follows:

The above alkyl, aryl, alkenyl, cyclic alkenyl and cyclic alkyl groups may have substituent(s) such as an alkoxyl group having from 1 to 6 carbon atoms (e.g., methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy, sec-butoxy, tert-butoxy, n-pentyloxy, n-hexyloxy), an alkoxyalkoxy group having from 2 to 12 carbon atoms (e.g., methoxymethoxy, ethoxymethoxy, propoxymethoxy, methoxyethoxy, ethoxyethoxy, propoxyethoxy, methoxypropoxy, ethoxypropoxy, methoxybutoxy, ethoxybutoxy), an alkoxyalkoxyalkoxy group having from 3 to 15 carbon atoms (e.g., methoxymethoxymethoxy, methoxymethoxyethoxy, methoxyethoxymethoxy, methoxyethoxyethoxy, ethoxymethoxymethoxy, ethoxymethoxyethoxy, ethoxyethoxymethoxy, ethoxyethoxyethoxy), an allyloxy group, an aryl group having from 6 to 18 carbon atoms (e.g., phenyl, tolyl, xylyl, naphthyl), an aryloxy group from 6 to 18 carbon atoms (e.g.,

phenoxy, tolyloxy, xylyloxy, naphthylloxy), a cyano group, a nitro group, a hydroxyl group, a tetrahydrofuryl group, an alkylamino group having from 1 to 6 carbon atoms (e.g., methylamino, ethylamino, n-propylamino, n-butylamino), a dialkylamino group having from 2 to 12 carbon atoms (e.g., dimethylamino, diethylamino, di-n-propylamino, di-n-butylamino), an alkylsulfonylamino group having from 1 to 6 carbon atoms (e.g., methylsulfonylamino, ethylsulfonylamino, n-propylsulfonylamino, isopropylsulfonylamino, n-butylsulfonylamino, sec-butylsulfonylamino, tert-butylsulfonylamino, n-pentylsulfonylamino, n-hexylsulfonylamino), a halogen atom (e.g., fluorine, chlorine, bromine, iodine), an alkoxycarbonyl group having from 2 to 7 carbon atoms (e.g., methoxycarbonyl, ethoxycarbonyl, n-propoxycarbonyl, isopropoxycarbonyl, n-butoxycarbonyl, sec-butoxycarbonyl, tert-butoxycarbonyl, n-pentyloxycarbonyl, n-hexyloxycarbonyl), or an alkylcarbonyloxy group having from 2 to 7 carbon atoms (e.g., methylcarbonyloxy, ethylcarbonyloxy, n-propylcarbonyloxy, isopropylcarbonyloxy, n-butylcarbonyloxy, sec-butylcarbonyloxy, tert-butylcarbonyloxy, n-pentylcarbonyloxy, n-hexylcarbonyloxy).

Please replace the paragraph beginning on page 17, line 11, through page 19, line 9 as follows:

These alkyl and aryl groups may have substituent(s) such as an alkoxyl group having from 1 to 6 carbon atoms (e.g., methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy, sec-butoxy, tert-butoxy, n-pentyloxy, n-hexyloxy), an alkoxyalkoxy group having from 2 to 12 carbon atoms (e.g., methoxymethoxy, ethoxymethoxy, propoxymethoxy, methoxyethoxy, ethoxyethoxy, propoxyethoxy, methoxypropoxy, ethoxypropoxy, methoxybutoxy, ethoxybutoxy), an alkoxyalkoxyalkoxy group having from 3 to 15 carbon atoms (e.g., methoxymethoxymethoxy, methoxymethoxyethoxy, methoxyethoxymethoxy, methoxyethoxyethoxy, ethoxymethoxymethoxy, ethoxymethoxyethoxy,

ethoxyethoxymethoxy, ethoxyethoxyethoxy), an allyloxy group, an aryl group having from 6 to 18 carbon atoms (e.g., phenyl, tolyl, xylyl, naphthyl), an aryloxy group from 6 to 18 carbon atoms (e.g., phenoxy, tolyloxy, xylyloxy, naphthyloxy), a cyano group, a nitro group, a hydroxyl group, a tetrahydrofuryl group, an alkylamino group having from 1 to 6 carbon atoms (e.g., methylamino, ethylamino, n-propylamino, n-butylamino), a dialkylamino group having from 2 to 12 carbon atoms (e.g., dimethylamino, diethylamino, di-n-propylamino, di-n-butylamino), an alkylsulfonylamino group having from 1 to 6 carbon atoms (e.g., methylsulfonylamino, ethylsulfonylamino, n-propylsulfonylamino, isopropylsulfonylamino, n-butylsulfonylamino, sec-butylsulfonylamino, tert-butylsulfonylamino, n-pentylsulfonylamino, n-hexylsulfonylamino), a halogen atom (e.g., fluorine, chlorine, bromine, iodine), an alkoxycarbonyl group having from 2 to 7 carbon atoms (e.g., methoxycarbonyl, ethoxycarbonyl, n-propoxycarbonyl, isopropoxycarbonyl, n-butoxycarbonyl, sec-butoxycarbonyl, tert-butoxycarbonyl, n-pentyloxycarbonyl, n-hexyloxycarbonyl), or an alkylcarbonyloxy group having from 2 to 7 carbon atoms (e.g., methylcarbonyloxy, ethylcarbonyloxy, n-propylcarbonyloxy, isopropylcarbonyloxy, n-butylcarbonyloxy, sec-butylcarbonyloxy, tert-butylcarbonyloxy, n-pentylcarbonyloxy, n-hexylcarbonyloxy).

Please replace the paragraph beginning on page 19, line 13, through page 21, line 3 as follows:

The examples of the substituents on ring B or ring D other than X and  $R_{12}$  include a straight chain or branched alkyl group having from 1 to 6 carbon atoms (e.g., methyl, ethyl, n-propyl, isopropyl, n-butyl, sec-butyl, tert-butyl, n-pentyl, n-hexyl), a cyclic alkyl group having from 3 to 6 carbon atoms (e.g., cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl), an alkoxyl group having from 1 to 6 carbon atoms (e.g., methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy, sec-butoxy, tert-butoxy, n-pentyloxy, n-hexyloxy), an alkylcarbonyl

group having from 1 to 7 carbon atoms (e.g., acetyl, propionyl, butyryl, isobutyryl, valeryl, isovaleryl, pivaloyl, hexanoyl, heptanoyl), a straight chain or branched alkenyl group having from 2 to 6 carbon atoms (e.g., vinyl, 1-propenyl, allyl, isopropenyl, 2-butenyl, 1,3-butadienyl, 1-pentenyl, 1-hexenyl), a cyclic alkenyl group having from 3 to 6 carbon atoms (e.g., cyclopentenyl, cyclohexenyl), a halogen atom (e.g., fluorine, chlorine, bromine, iodine), a formyl group, a hydroxyl group, a carboxyl group, a hydroxyalkyl group having from 1 to 6 carbon atoms (e.g., hydroxymethyl, hydroxyethyl), an alkoxycarbonyl group having from 2 to 7 carbon atoms (e.g., methoxycarbonyl, ethoxycarbonyl, n-propoxycarbonyl, isopropoxycarbonyl, n-butoxycarbonyl, sec-butoxycarbonyl, tert-butoxycarbonyl, n-pentyloxycarbonyl, n-hexyloxycarbonyl), a nitro group, a cyano group, an amino group, an alkylamino group having from 1 to 6 carbon atoms (e.g., methylamino, ethylamino, n-propylamino, n-butylamino), a dialkylamino group having from 2 to 12 carbon atoms (e.g., dimethylamino, diethylamino, di-n-propylamino, di-n-butylamino), an alkoxycarbonylalkyl group having from 3 to 7 carbon atoms (e.g., methoxycarbonylmethyl, ethoxycarbonylmethyl, n-propoxycarbonylmethyl, isopropoxycarbonylethyl), an alkylthio group having from 1 to 6 carbon atoms (e.g., methylthio, ethylthio, n-propylthio, sec-butylthio, tert-butylthio, n-pentylthio, n-hexylthio), an alkylsulfonyl group having from 1 to 6 carbon atoms (methylsulfonyl, ethylsulfonyl, n-propylsulfonyl, isopropylsulfonyl, n-butylsulfonyl, sec-butylsulfonyl, tert-butylsulfonyl, n-pentylsulfonyl, n-hexylsulfonyl), an aryl group having from 6 to 16 carbon atoms which may have substituent(s), and an arylcarbonyl group having from 7 to 17 carbon atoms which may have substituent(s).

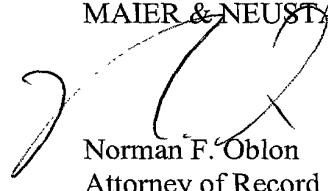
#### REMARKS

The specification has been amended to correct a typographical or clerical error. The original specification states that dialkylamino groups having from 1 to 12 carbon atoms are

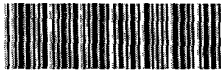
included in the group. The original specification presents such materials as dimethylamino, diethylamino, etc., as examples. Any dialkylamino group must contain two alkyl group and must therefore contain a minimum of 2 carbon atoms. The amendment corrects an obvious typographical or clerical error in the original specification. No new matter is believed to have been added. An action on the merits and allowance of claims is solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.

  
Norman F. Oblon  
Attorney of Record  
Registration No. 24,618

Richard L. Chinn, Ph.D.  
Registration No. 34,305



**22850**

(703) 413-3000  
Fax No.: (703) 413-2220  
RLC/kst

I:\atty\sukos\217360us-pr.doc



Marked-Up Copy

Serial No:

New application

Amendment Filed on:

Dec 17, 2001

IN THE SPECIFICATION

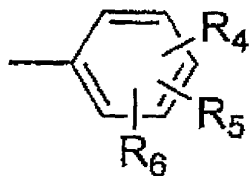
Please insert the following text as a separate paragraph on page 1, line 5.

--International application PCT/JP01/0326 has not been published in English under PCT Article 21(2).--

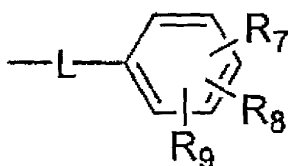
Please replace the paragraph beginning on page 5, line 8, through page 9, line 13 as follows:

--All of  $R_1$  in the same ring structure may be the same or different, and each  $R_1$  represents a hydrogen atom, a straight chain or branched alkyl group having from 1 to 6 carbon atoms (e.g., methyl, ethyl, n-propyl, isopropyl, n-butyl, sec-butyl, tert-butyl, n-pentyl, n-hexyl), a cyclic alkyl group having from 3 to 6 carbon atoms (e.g., cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl), an alkoxy group having from 1 to 6 carbon atoms (e.g., methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy, sec-butoxy, tert-butoxy, n-pentyloxy, n-hexyloxy), an alkylcarbonyl group having from 1 to 7 carbon atoms (e.g., acetyl, propionyl, butyryl, isobutyryl, valeryl, isovaleryl, pivaloyl, hexanoyl, heptanoyl), a straight chain or branched alkenyl group having from 2 to 6 carbon atoms (e.g., vinyl, 1-propenyl, allyl, isopropenyl, 2-butenyl, 1,3-butadienyl, 1-pentenyl, 1-hexenyl), a cyclic alkenyl group having from 3 to 6 carbon atoms (e.g., cyclopentenyl, cyclohexenyl), a halogen atom (e.g., fluorine, chlorine, bromine, iodine), a formyl group, a hydroxyl group, a carboxyl group, a hydroxyalkyl group having from 1 to 6 carbon atoms (e.g., hydroxymethyl, hydroxyethyl), an alkoxycarbonyl

group having from 2 to 7 carbon atoms (e.g., methoxycarbonyl, ethoxycarbonyl, n-propoxycarbonyl, isopropoxycarbonyl, n-butoxycarbonyl, sec-butoxycarbonyl, tert-butoxycarbonyl, n-pentyloxycarbonyl, n-hexyloxycarbonyl), a nitro group, a cyano group, an amino group, an alkylamino group having from 1 to 6 carbon atoms (e.g., methylamino, ethylamino, n-propylamino, n-butylamino), a dialkylamino group having from [1] 2 to 12 carbon atoms (e.g., dimethylamino, diethylamino, di-n-propylamino, di-n-butylamino), an alkoxy carbonylalkyl group having from 3 to 7 carbon atoms (e.g., methoxycarbonylmethyl, ethoxycarbonylmethyl, n-propoxycarbonylmethyl, isopropoxycarbonylethyl), an alkylthio group having from 1 to 6 carbon atoms (e.g., methylthio, ethylthio, n-propylthio, sec-butylthio, tert-butylthio, n-pentylthio, n-hexylthio), an alkylsulfonyl group having from 1 to 6 carbon atoms (methylsulfonyl, ethylsulfonyl, n-propylsulfonyl, isopropylsulfonyl, n-butylsulfonyl, sec-butylsulfonyl, tert-butylsulfonyl, n-pentylsulfonyl, n-hexylsulfonyl), an aryl group having from 6 to 16 carbon atoms which may have substituent(s), an arylcarbonyl group having from 7 to 17 carbon atoms which may have substituent(s),  $-\text{CR}_2=\text{C}(\text{CN})\text{R}_3$  [wherein  $\text{R}_2$  represents a hydrogen atom or an alkyl group having from 1 to 6 carbon atoms (e.g., methyl, ethyl, n-propyl, isopropyl, n-butyl, sec-butyl, tert-butyl, n-pentyl, n-hexyl); and  $\text{R}_3$  represents a cyano group or an alkoxy carbonyl group having from 2 to 7 carbon atoms (e.g., methoxycarbonyl, ethoxycarbonyl, n-propoxycarbonyl, isopropoxycarbonyl, n-butoxycarbonyl, sec-butoxycarbonyl, tert-butoxycarbonyl, n-pentyloxycarbonyl, n-hexyloxycarbonyl)],



[wherein R<sub>4</sub> to R<sub>6</sub> each represents a hydrogen atom, a nitro group, a halogen atom (e.g., fluorine, chlorine, bromine, iodine), a straight chain or branched alkyl group having from 1 to 6 carbon atoms (e.g., methyl, ethyl, n-propyl, isopropyl, n-butyl, sec-butyl, tert-butyl, n-pentyl, n-hexyl), a cyclic alkyl group having from 3 to 6 carbon atoms (e.g., cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl), an alkoxy group having from 1 to 6 carbon atoms (e.g., methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy, sec-butoxy, tert-butoxy, n-pentyloxy, n-hexyloxy)],



[wherein R<sub>7</sub> to R<sub>9</sub> each represents a hydrogen atom, a nitro group, a halogen atom (e.g., fluorine, chlorine, bromine, iodine), a straight chain or branched alkyl group having from 1 to 6 carbon atoms (e.g., methyl, ethyl, n-propyl, isopropyl, n-butyl, sec-butyl, tert-butyl, n-pentyl, n-hexyl), a cyclic alkyl group having from 3 to 6 carbon atoms (e.g., cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl), an alkoxy group having from 1 to 6 carbon atoms (e.g., methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy, sec-butoxy, tert-butoxy, n-pentyloxy, n-hexyloxy); and L represents -SCH<sub>2</sub>- or -SO<sub>3</sub>-, a halogenated alkyl group having from 1 to 6 carbon atoms (e.g., trifluoromethyl, pentafluoroethyl, heptafluoro-n-propyl, heptafluoroisopropyl, perfluoro-n-butyl, perfluoro-sec-butyl, perfluoro-tert-butyl, perfluoro-n-pentyl, perfluoro-n-hexyl), a halogenated alkoxy group having from 1 to 6 carbon atoms (e.g., trifluoromethoxy, pentafluoroethoxy, 2,2,2-trifluoroethoxy, pentafluoroethoxy, perfluoro-n-butoxy, perfluoro-sec-butoxy, perfluoro-tert-butoxy, perfluoro-n-pentyloxy, perfluoro-n-hexyloxy), or a halogenated alkylthio group having from 1 to 6 carbon atoms (e.g., trifluoromethylthio, pentafluoroethylthio, heptafluoro-n-propylthio,

heptafluoroisopropylthio, perfluoro-n-butylthio, perfluoro-sec-butylthio, perfluoro-n-pentylthio, perfluoro-n-hexylthio).--

Please replace the text beginning on page 12, line 17, through page 14, line 4 as follows:

--The above alkyl, aryl, alkenyl, cyclic alkenyl and cyclic alkyl groups may have substituent(s) such as an alkoxyl group having from 1 to 6 carbon atoms (e.g., methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy, sec-butoxy, tert-butoxy, n-pentyloxy, n-hexyloxy), an alkoxyalkoxy group having from 2 to 12 carbon atoms (e.g., methoxymethoxy, ethoxymethoxy, propoxymethoxy, methoxyethoxy, ethoxyethoxy, propoxyethoxy, methoxypropoxy, ethoxypropoxy, methoxybutoxy, ethoxybutoxy), an alkoxyalkoxyalkoxy group having from 3 to 15 carbon atoms (e.g., methoxymethoxymethoxy, methoxymethoxyethoxy, methoxyethoxymethoxy, methoxyethoxyethoxy, ethoxymethoxymethoxy, ethoxymethoxyethoxy, ethoxyethoxymethoxy, ethoxyethoxyethoxy), an allyloxy group, an aryl group having from 6 to 18 carbon atoms (e.g., phenyl, tolyl, xylyl, naphthyl), an aryloxy group from 6 to 18 carbon atoms (e.g., phenoxy, tolyloxy, xylyloxy, naphthyloxy), a cyano group, a nitro group, a hydroxyl group, a tetrahydrofuryl group, an alkylamino group having from 1 to 6 carbon atoms (e.g., methylamino, ethylamino, n-propylamino, n-butylamino), a dialkylamino group having from [1] 2 to 12 carbon atoms (e.g., dimethylamino, diethylamino, di-n-propylamino, di-n-butylamino), an alkylsulfonylamino group having from 1 to 6 carbon atoms (e.g., methylsulfonylamino, ethylsulfonylamino, n-propylsulfonylamino, isopropylsulfonylamino, n-butylsulfonylamino, sec-butylsulfonylamino, tert-butylsulfonylamino, n-pentylsulfonylamino, n-hexylsulfonylamino), a halogen atom (e.g., fluorine, chlorine, bromine, iodine), an alkoxycarbonyl group having from 2 to 7 carbon atoms (e.g., methoxycarbonyl, ethoxycarbonyl, n-propoxycarbonyl, isopropoxycarbonyl, n-

butoxycarbonyl, sec-butoxycarbonyl, tert-butoxycarbonyl, n-pentyloxycarbonyl, n-hexyloxycarbonyl), or an alkylcarbonyloxy group having from 2 to 7 carbon atoms (e.g., methylcarbonyloxy, ethylcarbonyloxy, n-propylcarbonyloxy, isopropylcarbonyloxy, n-butylcarbonyloxy, sec-butylcarbonyloxy, tert-butylcarbonyloxy, n-pentylcarbonyloxy, n-hexylcarbonyloxy).--

Please replace the paragraph beginning on page 17, line 11, through page 19, line 9 as follows:

--These alkyl and aryl groups may have substituent(s) such as an alkoxy group having from 1 to 6 carbon atoms (e.g., methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy, sec-butoxy, tert-butoxy, n-pentyloxy, n-hexyloxy), an alkoxyalkoxy group having from 2 to 12 carbon atoms (e.g., methoxymethoxy, ethoxymethoxy, propoxymethoxy, methoxyethoxy, ethoxyethoxy, propoxyethoxy, methoxypropoxy, ethoxypropoxy, methoxybutoxy, ethoxybutoxy), an alkoxyalkoxyalkoxy group having from 3 to 15 carbon atoms (e.g., methoxymethoxymethoxy, methoxymethoxyethoxy, methoxyethoxymethoxy, methoxyethoxyethoxy, ethoxymethoxymethoxy, ethoxymethoxyethoxy, ethoxyethoxymethoxy, ethoxyethoxyethoxy), an allyloxy group, an aryl group having from 6 to 18 carbon atoms (e.g., phenyl, tolyl, xylyl, naphthyl), an aryloxy group from 6 to 18 carbon atoms (e.g., phenoxy, tolyloxy, xylyloxy, naphthyloxy), a cyano group, a nitro group, a hydroxyl group, a tetrahydrofuryl group, an alkylamino group having from 1 to 6 carbon atoms (e.g., methylamino, ethylamino, n-propylamino, n-butylamino), a dialkylamino group having from [1] 2 to 12 carbon atoms (e.g., dimethylamino, diethylamino, di-n-propylamino, di-n-butylamino), an alkylsulfonylamino group having from 1 to 6 carbon atoms (e.g., methylsulfonylamino, ethylsulfonylamino, n-propylsulfonylamino, isopropylsulfonylamino, n-butylsulfonylamino, sec-butylsulfonylamino, tert-butylsulfonylamino, n-pentylsulfonylamino, n-hexylsulfonylamino), a halogen atom (e.g., fluorine, chlorine,

bromine, iodine), an alkoxycarbonyl group having from 2 to 7 carbon atoms (e.g., methoxycarbonyl, ethoxycarbonyl, n-propoxycarbonyl, isopropoxycarbonyl, n-butoxycarbonyl, sec-butoxycarbonyl, tert-butoxycarbonyl, n-pentyloxycarbonyl, n-hexyloxycarbonyl), or an alkylcarbonyloxy group having from 2 to 7 carbon atoms (e.g., methylcarbonyloxy, ethylcarbonyloxy, n-propylcarbonyloxy, isopropylcarbonyloxy, n-butylcarbonyloxy, sec-butylcarbonyloxy, tert-butylcarbonyloxy, n-pentylcarbonyloxy, n-hexylcarbonyloxy).--

Please replace the paragraph beginning on page 19, line 13, through page 21, line 3 as follows:

--The examples of the substituents on ring B or ring D other than X and  $R_{12}$  include a straight chain or branched alkyl group having from 1 to 6 carbon atoms (e.g., methyl, ethyl, n-propyl, isopropyl, n-butyl, sec-butyl, tert-butyl, n-pentyl, n-hexyl), a cyclic alkyl group having from 3 to 6 carbon atoms (e.g., cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl), an alkoxyl group having from 1 to 6 carbon atoms (e.g., methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy, sec-butoxy, tert-butoxy, n-pentyloxy, n-hexyloxy), an alkylcarbonyl group having from 1 to 7 carbon atoms (e.g., acetyl, propionyl, butyryl, isobutyryl, valeryl, isovaleryl, pivaloyl, hexanoyl, heptanoyl), a straight chain or branched alkenyl group having from 2 to 6 carbon atoms (e.g., vinyl, 1-propenyl, allyl, isopropenyl, 2-butenyl, 1,3-butadienyl, 1-pentenyl, 1-hexenyl), a cyclic alkenyl group having from 3 to 6 carbon atoms (e.g., cyclopentenyl, cyclohexenyl), a halogen atom (e.g., fluorine, chlorine, bromine, iodine), a formyl group, a hydroxyl group, a carboxyl group, a hydroxyalkyl group having from 1 to 6 carbon atoms (e.g., hydroxymethyl, hydroxyethyl), an alkoxycarbonyl group having from 2 to 7 carbon atoms (e.g., methoxycarbonyl, ethoxycarbonyl, n-propoxycarbonyl, isopropoxycarbonyl, n-butoxycarbonyl, sec-butoxycarbonyl, tert-butoxycarbonyl, n-pentyloxycarbonyl, n-hexyloxycarbonyl), a nitro group, a cyano group, an amino group, an

alkylamino group having from 1 to 6 carbon atoms (e.g., methylamino, ethylamino, n-propylamino, n-butylamino), a dialkylamino group having from [1] 2 to 12 carbon atoms (e.g., dimethylamino, diethylamino, di-n-propylamino, di-n-butylamino), an alkoxy carbonylalkyl group having from 3 to 7 carbon atoms (e.g., methoxycarbonylmethyl, ethoxycarbonylmethyl, n-propoxycarbonylmethyl, isopropoxycarbonylethyl), an alkylthio group having from 1 to 6 carbon atoms (e.g., methylthio, ethylthio, n-propylthio, sec-butylthio, tert-butylthio, n-pentylthio, n-hexylthio), an alkylsulfonyl group having from 1 to 6 carbon atoms (methylsulfonyl, ethylsulfonyl, n-propylsulfonyl, isopropylsulfonyl, n-butylsulfonyl, sec-butylsulfonyl, tert-butylsulfonyl, n-pentylsulfonyl, n-hexylsulfonyl), an aryl group having from 6 to 16 carbon atoms which may have substituent(s), and an arylcarbonyl group having from 7 to 17 carbon atoms which may have substituent(s).--